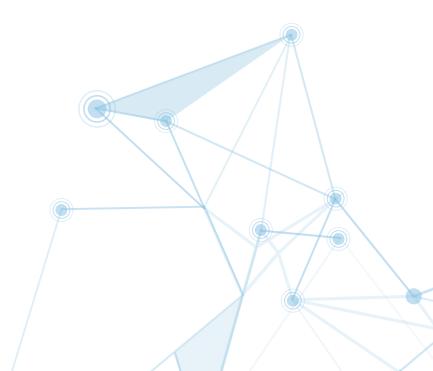


Contents

Introduction 3)
I. Cash management challenges and priorities of corporates4	ł
Cash management priorities of corporates5	
• Expectations of corporate customers in a nutshell5	
II. The response of corporate banks6	
Virtual accounts upgrade multi-bank cash management	
III. Digital transformation of cash management	7
IV. ConclusionS	Э
About Banking Visionaries Council (BVC)1	0



Introduction

One of the most important functions of a corporate treasurer is managing working capital, basically balancing current assets with liabilities to maximize yield. By derivation, cash and liquidity management is a top focus area for corporates. As corporates expand their global footprint, they need robust capabilities to handle multiple currencies and interest rates in different markets.

A unified view of global liquidity, and cash flows, is central to this. Unfortunately, most corporate treasurers still do not have this visibility. While retail banking has undergone massive digitization, corporate banking is still largely carried out face-to-face, by a team of relationship managers. Even today, treasurers in large organizations rely extensively on spreadsheets and manual calculations to manage their company's financial position.

But change is in the air. As those working in client organizations encounter increasingly superior experiences in retail banking and other areas such as retail and telecom, they are starting to demand the same from corporate banking.

The possibilities in the digital world have led to retail-like expectations of corporate customers when it comes to managing the challenges in their cash and liquidity management. This paper brings together perspectives and insights from the distinguished body of banking leaders and practitioners of the Banking Visionaries' Council, on topics ranging from the evolving demands and priorities of corporate customers to the leading digital solutions from banks, and the emerging opportunities of digitization in the cash and liquidity management space.

In the next section we look at the key challenges, priorities and expectations of large corporate organizations.







Cash management challenges and priorities of corporates

Today, corporates are preoccupied with overcoming the challenges they face in day-to-day cash and liquidity management.

The biggest challenge stems from expansion into new shores. As corporate banks enter foreign markets, they are faced with unexpected funding requirements and foreign currency exposure, different levels of investment risk, and geopolitical uncertainty. Treasurers need to tread a fine line while managing cash and liquidity to balance returns and risk.

Regulations are becoming stricter worldwide. In addition to complying with global regulations such as the Basel norms, corporate organizations must act in accordance with a host of regional and local laws in the markets where they are present. Not only does this create a huge administrative and cost burden, it also increases the risk of penalty for non-compliance.

At the time of writing this document, the US Dollar is surging against most currencies, buoyed by a host of factors including strong domestic manufacturing performance and rising risks in several emerging markets. For corporate treasurers, mitigating risk and reducing costs in forex operations amidst a volatile environment, is among the biggest challenges.

Maximizing interest yield in a low-interest – or even negative – rate environment in the developed world is another problem. And while interest rates are higher in emerging economies, they come at greater economic and political risk.

The proliferation of new technologies is also posing a challenge to corporate banking customers, many of whom are not sure about which solutions to invest in.



Cash management priorities of corporates

In most corporate organizations, it is these challenges that drive the biggest priorities. Hence corporate treasurers and CFOs are putting a lot of energy into improving cash flow forecasting and liquidity planning to gain insights into things such as committed cash inflows and outflows, interest rate trends, best money market investment destinations, among others.

For years, treasurers have utilized cash pooling and sweeping facilities to consolidate liquidity in one place. Optimizing these processes, backed by technology is now a key priority.

Several large companies with global presence have set up "in-house banks" to reconcile transactions internally, before entering into external banking relationships. By doing this, they reduce the number of banking relationships and also avoid duplicating banking products and charges.

Some businesses have also set up payment and collection factories, which are like in-house banks, but are focused on payments and receivables. These factories serve to streamline, aggregate and deduplicate payments and receivables processes.

Corporate treasurers are also adopting virtual accounts. One of the leading innovations in the liquidity management space, a virtual account, as the name suggests, exists only virtually and not in a physical ledger. It simplifies the management of corporate banking relationships for companies with vast operations across several geographies, by minimizing the number of real bank accounts in different locations and corresponding currencies. A company can maintain one primary account in home currency and set up virtual accounts, linked to the primary account. With virtual accounts, corporates can vastly rationalize cost of operations, improve funds management and mitigate liquidity risks. What's more, virtual accounts empower corporates with digital self-serve models that allow them to manage liquidity structures based on emerging needs.

Here an example may be useful. Take the case of a ride-hailing radio taxi company, whose operations span multiple countries, cities and have several million partner driver relationships. Imagine the mess if the company maintained a separate account for each driver on its roster. Instead, with a virtual account capability, the company can open a single account at a city/ regional level and assign a unique virtual account to every driver in that area. All customer payments go into these virtual accounts, which the company pools and sweeps to make payouts to its drivers.

Expectations of corporate customers in a nutshell

Specifically, corporate customers expect the following from their banking experience:



Real-time view of cash flow to improve visibility into and control over complex corporate reconciliation structures spanning currencies, geographies, interest rates and regulatory regimes.



Global access to domestic and international accounts across multiple banks, enabling an integrated cash management experience. This calls for eliminating the need to separately log in to each account across banking relationships, by providing a single sign on interface.



Innovative liquidity planning and forecasting solutions that apply artificial intelligence and automation to historical patterns to make predictions about cash positions, and provide treasurers with insights that improve yields or reduce interest costs.



Digital, omni-channel experiences for managing liquidity – similar to consumer banking – enabling treasurers to work seamlessly on-the-go, on any device and channel of their choice.



Integrated cash management, enabled by straight through processing, which creates synergies by plugging into treasury, payments and receivables systems.



Flexible integration with ERP systems used for treasury operations to automate accounting systems reconciliation.



Lower cost and administrative overheads while complying with global, regional and local regulations.



Corporate banks step up

On their part, corporate banks are taking several initiatives to meet their customers' expectations. In response to the demand for integrated cash management, banks are setting up portals that offer global access to both domestic and international accounts through a single electronic interface. 'Barclay's iPortal offers a consolidated view into several corporate banking activities, including cash management. With such facilities, users can see an instant snapshot of bank accounts and products, and authorize payments, manage cash and perform many other actions.

Banks are enabling digital self-service models which enable corporate clients to take control of several operations, including account structuring, fund transfer, and dynamic investment management.

Using virtual accounts, corporate banks offer payment on behalf of (PoBo) and collection on behalf of (CoBo) services, thereby eliminating the need for multiple physical accounts and traditional products such as pooling and sweeping. ²JP Morgan's Virtual Account Management as a platform, provides value added services enabling corporates with integrated cash management, Forex, liquidity and investments management. Multicurrency virtual account structuring,

virtual cash concentration and pooling, remote payments clearing, and internal netting are some of the innovative products that corporates benefit from.

To provide the digital omni-channel experiences that clients are asking for, corporate banks are expanding their digital channel infrastructure. ³HSBCnet is a mobile corporate banking platform that has helped corporates manage their liquidity and cash flows effectively. With faster payments, they enjoy improved credit terms, ratings and enhanced growth propositions.

Last but not least, corporate banks are investing in blockchain-based payment networks to enable real-time payments at very low cost to clients. ⁴For example, leading banks Emirates NBD and India's ICICI Bank have leveraged Finacle Payments Connect to bring down cross-country payments time to less than a minute, across the world's largest remittance corridor.

Virtual accounts upgrade multi-bank cash management

In the past, multi-bank cash management portals displayed account information pertaining to accounts held in other banks. Since the information was received via SWIFT messages and reconciled at the end of the day, it was static in nature. As a result, companies never knew their exact cash position at any given time. Now, open banking regulations, such as PSD2, are forcing a change by mandating the sharing of account information through APIs in real-time. Information from different banks is being fed via APIs into a virtual account management system that gives corporate banking customers a realtime view of their financial position.

Digital transformation of cash management

At the heart of all these developments is a wave of digital technologies. Together, automation, blockchain, big data and analytics, artificial intelligence, APIs and cloud are steadily transforming the liquidity management space.

Thanks to robotic automation, cash management systems are enabled with self-learning and decision making capabilities, helping improve cash forecasting techniques. With Natural Language Processing (NLP) solutions, the systems are designed to analyze intraday balances, various transaction statements, and effectively forecast liquidity positions.

Cognitive automation takes these capabilities forward by taking decisions on behalf of humans. For example, it can analyze transactions that impact the various payable and receivable systems, forecast projections, make liquidity decisions and handle exceptions.

A global auto parts supplier used over 3 million records of cash management data from accounts payables and receivables, payroll, intercompany netting to build a bot for forecasting payments flowing in from customers based on past patterns. By doing this, the company redeployed cash balances more efficiently, reduced interest expenses and improved short-term liquidity forecasting accuracy to 97 percent.

Apart from NLP and cognitive automation that were mentioned above, other artificial intelligence technologies are also transforming this space by improving cash flow forecasting, detecting fraud, and predicting events relevant to cash and liquidity management.

As discussed earlier, APIs are opening up corporate banking to the external world, and exposing cash management systems to third parties, such as Fintech companies and developers to accelerate innovation in this area.

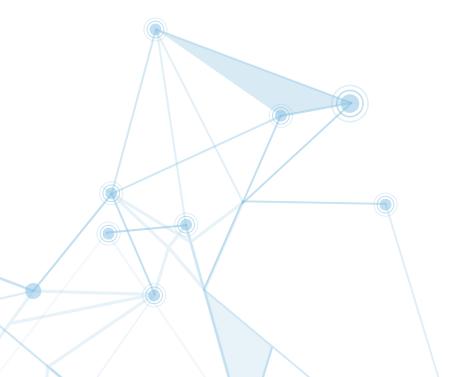
Cash management using cloud-based solutions is empowering treasurers with access to cash positions at any time and from anywhere.

With Blockchain, banks can enable cross-border multi-currency payment and settlement in real-time, and bring higher transparency and predictability to cash and liquidity management.

Big data analytics on transaction data can help forecast cash position in real-time, predict other relevant scenarios and improve receivables management.

Fintech companies are at the forefront of cash management's digital transformation. ⁵Flinqer offers innovative tools enabling flexible cash utilization and control over working capital. ⁶PrimeRevenue has a cloud-based application that brings rigor to supply chain finance management, from design to execution to measurement, and also enables businesses to make better cash-related decisions. ⁷Growth Street's business insights platform offers actionable insights and 90 - day cash forecasts, while ⁸Fluidly leverages Al and financial modeling to predict cash flow and warn users of an imminent cash crunch.

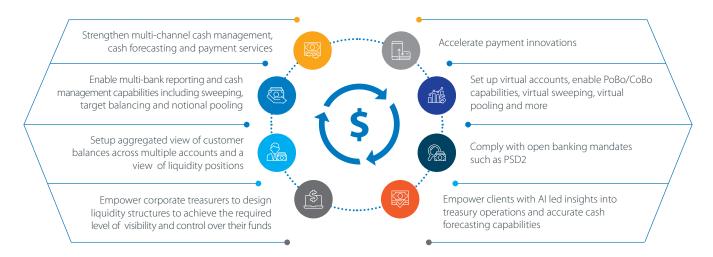
A next-generation cash management solution from ⁹Cashforce integrates seamlessly with ERP and banking systems to give deep insights into transactions. The solution can be set up very quickly even in complex environments. ¹⁰CashAnalytics offers software to accurately forecast cash flow and provide analytics in real-time.





Conclusion

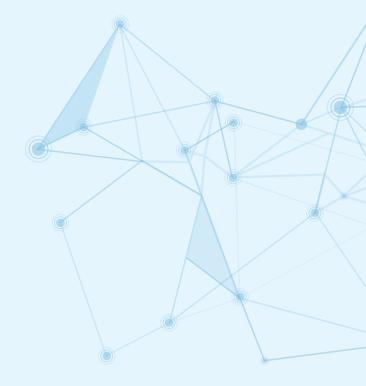
There are multiple opportunities for banks to reimagine corporate cash management for their digitally nuanced corporate clients. Infosys recommends that banks begin their digital cash management transformation journey as soon as possible. Banks should specifically evaluate the following initiatives and areas of consideration to transform cash and liquidity management:



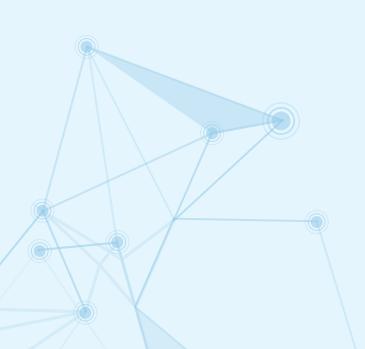
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About Banking Visionaries' Council (BVC)

Banking Visionaries' Council has been instituted by Infosys Finacle to collaborate with senior business and technology leaders from the banking community to develop actionable point-of-views around contemporary themes within the industry. The purpose of this council is to solve the most pertinent problems with research and collective thought leadership efforts. Currently, the council consists of a twenty-member-strong board with representation from eleven countries across six continents.

This point of view paper is an abridged version of the collaborative research work done by the council.

For more information on the council, please reach out to finacle@edgeverve.com



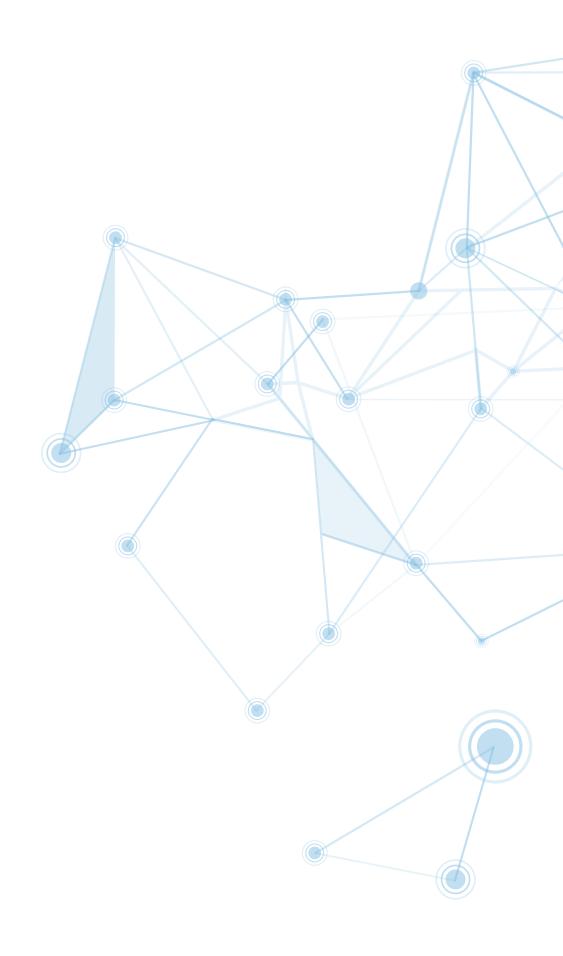
Share key market development and trends observed in respective geos with rest of the group



Collaborate to develop actionable point-of-view on how banks can leverage emerging trends



Openly discuss learning from innovation initiatives taken by respective banks



About Infosys Finacle

Finacle is the industry-leading digital banking solution suite from EdgeVerve Systems, a wholly owned product subsidiary of Infosys. Finacle helps traditional and emerging financial institutions drive truly digital transformation to achieve frictionless customer experiences, larger ecosystem play, insights—driven interactions and ubiquitous automation. To-day, banks in over 100 countries rely on Finacle to service more than a billion consumers and 1.3 billion accounts.

Finacle solutions address the core banking, omnichannel banking, payments, treasury, origination, liquidity management, Islamic banking, wealth management, analytics, artificial intelligence, and blockchain requirements of financial institutions to drive business excellence. An assessment of the top 1250 banks in the world reveals that institutions powered by the Finacle Core Banking solution, on average, enjoy 7.2% points lower costs-to-income ratio than others.



For more information, contact finacle@edgeverve.com

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